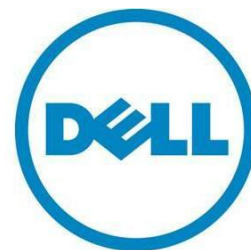

Deploying OpenManage Server Administrator using OpenManage Essentials

This Dell technical white paper provides detailed instructions to deploy OpenManage Server Administrator (OMSA) using OpenManage Essentials.

OME Engineering Team



This document is for informational purposes only and may contain typographical errors and technical inaccuracies. The content is provided as is, without express or implied warranties of any kind.

© 2012-2013 Dell Inc. All rights reserved. Dell and its affiliates cannot be responsible for errors or omissions in typography or photography. Dell, the Dell logo, and PowerEdge are trademarks of Dell Inc. Intel and Xeon are registered trademarks of Intel Corporation in the U.S. and other countries. Microsoft, Windows, and Windows Server are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others.
August 2013 | Rev 2.0

Contents

Executive summary	5
Introduction	5
Advantages of installing OMSA on the managed system	5
Downloading OpenManage Server Administrator packages	6
OpenManage Server Administrator packages	7
Linux OMSA packages	7
OMSA Installation Arguments	8
Dependencies of Linux OMSA package	9
Creating an OMSA deployment task	10
Sample: Upgrade Windows task.....	14
OMSA upgrade parameters for a Windows system	14
Sample: Windows OMSA Uninstall	17
Sample: Linux OMSA Uninstall.....	19
Deploying OMSA as Sudo User	20
Troubleshooting Tool	23
Troubleshooting.....	24
Frequently Asked Questions	25
Summary	26
Learn more	26

Figures

Figure 1. A server discovered by SNMP without OMSA is classified as unknown	10
Figure 2. Creating a deployment task.	10
Figure 3. Optional Install Arguments	11
Figure 4. Task Target tab.....	11
Figure 5. Schedule and Credentials tab	12
Figure 6. Remote Tasks window	12
Figure 7. Viewing remote task details.....	13

Figure 8.	Viewing execution details	13
Figure 9.	Viewing task execution history	13
Figure 10.	Using the CopyResult button	14
Figure 11.	Creating a new Cloned task	14
Figure 12.	Naming the cloned task	15
Figure 13.	New Cloned Task	15
Figure 14.	Editing the cloned task.....	15
Figure 15.	Deployment Wizard	16
Figure 16.	Creating a new cloned task	17
Figure 17.	Naming the cloned task	17
Figure 18.	New Cloned task.....	17
Figure 19.	Editing the cloned task.....	18
Figure 20.	Editing the cloned task.....	18
Figure 21.	Creating a new cloned task	19
Figure 22.	Naming the cloned task	19
Figure 23.	New cloned task.....	19
Figure 24.	Editing the cloned task.....	19
Figure 25.	Deployment Wizard	20
Figure 26.	Create Deployment Task.....	21
Figure 27.	Deployment Wizard	21
Figure 28.	Schedule and Credentials	22
Figure 29.	Running the Troubleshooting Tool	23
Figure 30.	Server administrator information	23

Tables

Table 1.	Windows OMSA packages.....	7
Table 2.	OMSA packages for specific Linux operating systems	7
Table 3.	Installation arguments for Linux and Windows targets	8

Executive summary

Dell OpenManage Essentials is designed and implemented to replace the legacy Dell IT Assistant.

OpenManage Server Administrator (OMSA) provides a comprehensive set of integrated management services designed for system administrators to manage systems locally and remotely on the network.

You can deploy OpenManage Server Administrator on the managed target using OpenManage Essentials.

This whitepaper gives a detailed description about:

- Location to download OMSA packages
- Advantages of installing OMSA
- Arguments used during installation
- How to create an OMSA task using OME

Introduction

OpenManage Essentials (OME) is a Web-based one-to-many hardware management application that provides a comprehensive view of Dell systems, devices, and components in the enterprise's network.

Using OME, you can discover and inventory Dell systems and other devices and components, monitor system health and perform system updates.

A managed system is any system that is monitored and managed using Dell OpenManage Server Administrator (OMSA).

A management station can be any system where you install OpenManage Essentials to monitor and discover a managed system.

OMSA can be deployed on the managed node using the Remote Task feature in OpenManage Essentials.

Advantages of installing OMSA on the managed system

When a system with OMSA is discovered and inventoried, OME gives you the ability to:

View detailed hardware inventory information:

- NIC Information
- RAC Device Information
- Power Supply Information
- Embedded Device Information
- Controller Information
- Enclosure Information

- Physical Disk Information
- Virtual Disk Information

View detailed software inventory information:

- Driver
- BIOS
- Firmware

View server health:

- Determine if server health is in normal, warning, or critical state based on the server administrator's status.
- Update servers (drivers, firmware, BIOS, application, and so on).
- Receive alerts for any event that occurred at target system.
- Perform remote server administrator tasks: OMSA provides a comprehensive management solution in two ways - GUI and command-line interface. You can run the command-line tasks from OME using the Remote Server Administrator Command Line task.

OMSA Command Line Types:

- **omconfig**: writes values that are assigned by the user to an object's properties. For example: Specific values are assigned for warning thresholds on components.
- **omhelp**: displays short text help for the command-line interface.
- **omreport**: displays management information reports of the server.

From OpenManage Essentials, you can launch the OMSA console from a discovered server and view the server details or perform any actions.

Downloading OpenManage Server Administrator packages

To download OMSA installation package, go to support.dell.com

1. Click **Servers > Storage & Networking**.
2. Click **PowerEdge**.
3. Select the appropriate server model.
4. Click **Drivers and Downloads**.
5. Click **Systems Management**.
6. Download the latest version of OpenManage Server Administrator package supported by the managed system.

OpenManage Server Administrator packages

Table 1. Windows OMSA packages

Package type	Clean installation	Major version upgrade (5.x to 6.x to 7.x)	Minor version upgrade (6.x to 6.y)
.msi	Supported	Supported	Supported
.msp	Not supported	Not supported	Supported (n to n+1)
.exe	Not supported	Supported (n to n+2)	Supported (n to n+2)

Linux OMSA packages

Use the Consolidated OMSA package to install/upgrade on any Linux targets (RHEL, SLES or ESX).

The OMSA package for Linux is of two types:

- OM-SrvAdmin-Dell-Web-LX****.tar
- OM-SrvAdmin-Dell-Web-LX***.tar.gz.sign

Table 2. OMSA packages for specific Linux operating systems

Operating system	Package
SLES11	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.SLES11.i386_A01.14.tar.gz
	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.SLES11.i386_A01.14.tar.gz.sign
ESX4	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.ESX41.i386_A01.tar.gz
	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.ESX41.i386_A01.tar.gz.sign
RHEL5	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.RHEL5.x86_64_A01.4.tar.gz
	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.RHEL5.x86_64_A01.4.tar.gz.sign
SLES10	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.SLES10.x86_64_A01.6.tar.gz
	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.SLES10.x86_64_A01.6.tar.gz.sign
RHEL6	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.RHEL6.x86_64_A01.5.tar.gz
	OM-SrvAdmin-Dell-Web-LX-6.5.0-2247.RHEL6.x86_64_A01.5.tar.gz.sign

OMSA Installation Arguments

Use arguments to selectively install the OMSA components. Server Administrator Web Server, Server Instrumentation, Storage Management are *optional* OMSA components. If no arguments are provided, then the complete OMSA package is installed.

Note: The OMSA installation arguments are different for Windows and Linux targets.

Table 3. Installation arguments for Linux and Windows targets

Installed component	Linux arguments	Windows arguments
Server Administrator Web Server only	-w	ADDLOCAL=IWS
Server Administrator Instrumentation only	-d	ADDLOCAL=SA
Server Administrator Web Server and Server Instrumentation	-w -d	ADDLOCAL=SA,IWS

Use arguments to reinstall/remove components.

Example:

REINSTALL=RACi (Re install 'Remote Access Controller')

REMOVE=SA (Remove Server Administrator Instrumentation)

You can also use these arguments in combination:

For example: ADDLOCAL=OMSM REINSTALL=IWS REMOVE=SA

Note: All OMSA installation arguments for Windows targets work only on MSI packages. To know more about OMSA components and the install arguments refer to below links:-

<http://www.dell.com/downloads/global/power/ps4q05-20050135-Akinnuoye-OE.pdf>

http://support.dell.com/support/edocs/software/smsom/7.1/en/omsa_ig/pdf/OMIUG.pdf

Dependencies of Linux OMSA package

Check that the signature file resides with the OMSA package while deploying OMSA on a Linux target. The signature file has a .sign extension. For example:

```
OM-SrvAdmin-Dell-Web-XXXX.tar.gz.sign
```

OpenManage Essentials communicates with the Linux target through SSH. Make sure the correct SSH port is provided while creating the OMSA deployment task. By default, OpenManage Essentials uses SSH port (22) and generates the trusted key.

Note: By default, the root login through SSH is not enabled on VMware ESX servers. As a result, all OpenManage Essentials tasks that use the root account fail. To enable the SSH root login on the ESX server, set the option "PermitRootLogin=YES" in "/etc/ssh/sshd_conf" file.

To install OMSA on a 64-bit Linux system, install the following 32 bit rpms and their dependent packages before running the OMSA Deploy task from OpenManage Essentials:

- compat-libstdc++-33.i686
- pam.i686
- glibc.i686
- zlib.i686
- libgcc.i686

To know more about dependency package:

<http://en.community.dell.com/techcenter/systemsmanagement/f/4494/t/19425042.aspx>

The srvadmin-cm RPM that provides the 32-bit inventory collector does not get installed on a 64-bit system. The inventory collector utility feeds software inventory data to OpenManage Essentials.

This package is available in the OMSA DVD at following location:

```
/xxx/SYSMGMT/srvadmin/linux/custom/<OSTYPE>/Server-Instrumentation/i386/
```

After the OMSA installation on a Linux server:

- Restart SNMP service:
 - service snmpd restart
- Restart OMSA services:
 - Navigate to opt/dell/srvadmin/sbin
 - ./srvadmin-services.sh - command to restart OMSA services

Creating an OMSA deployment task

When a server without OMSA is discovered (using SNMP protocol) in OpenManage Essentials, it is classified as *unknown*. A server with OMSA gets classified under *Servers*.

Figure 1. A server discovered by SNMP without OMSA is classified as unknown



Note: When a Windows Dell server without OMSA is discovered using WMI protocol, it is classified under *Servers*.

1. Navigate to **Manage > Remote Tasks**.
2. Click **Create Deployment Task**.

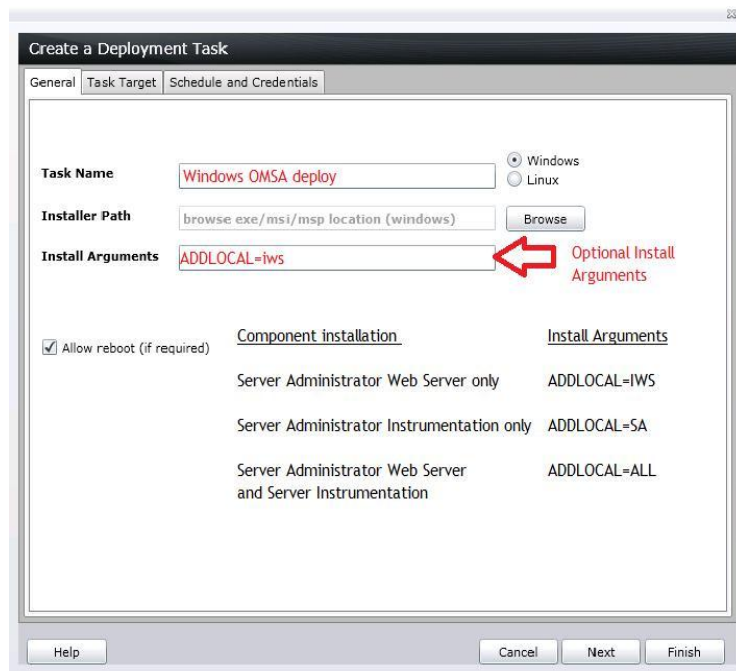
Figure 2. Creating a deployment task



Deploying OpenManage Server Administrator using OpenManage Essentials

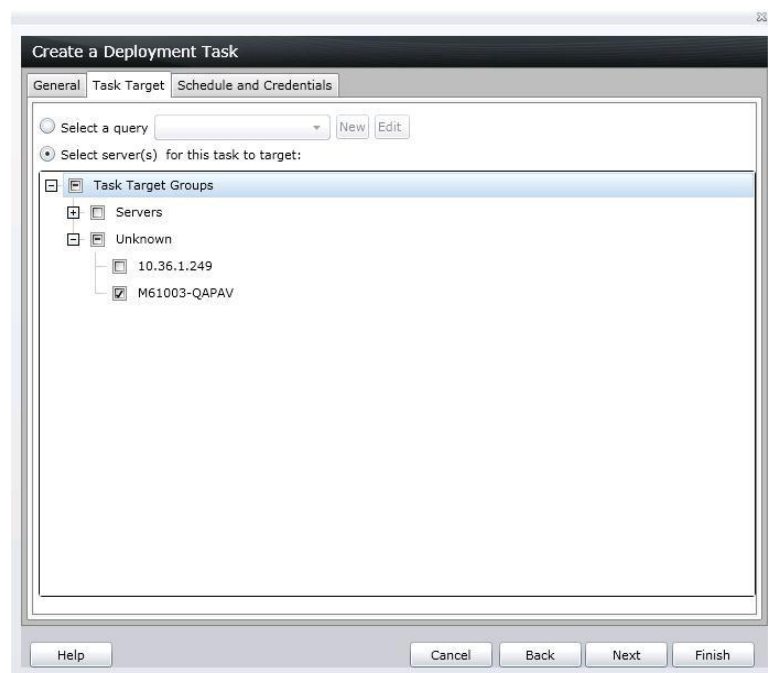
3. In the Create Deployment task dialog box, provide Task name, select the type of OS (Windows or Linux), browse to the location where OMSA package is saved, and provide the optional arguments (see [OMSA Installation Arguments](#)).

Figure 3. Optional Install Arguments



4. Click **Next**.
5. In the Task Target tab, select the target for OMSA installation or upgrade.

Figure 4. Task Target tab



6. Click **Next**.
7. Select **Schedule** and enter the credentials for the server where OMSA is being installed. To run the task immediately, select **Run now**. To set a date and time to run the task, select **Set schedule**.
8. To activate a schedule for a task, select **Activate schedule**.
Activate schedule is enabled by default when the *Set schedule* option is selected. To disable a scheduled task, clear **Activate Schedule**.

Figure 5. Schedule and Credentials tab

Create a Deployment Task

General Task Target **Schedule and Credentials**

Set schedule: ☐ Activate Schedule

☒ Run now
☐ Set schedule 2/21/2012 8:32 PM

Enter User Name and Password:
 <domain>\<user name> or localhost\<user name>

User name: localhost\administrator
 Password:

Help Cancel Back Finish

9. Click **Finish**.

A task gets created and the task state is set to running regardless of the schedule. The task execution runs in two stages:

- a. Downloads the package to the OpenManage Essentials installation directory\System Update\Packages folder
- b. Deploys OMSA on the target. This task starts at the previously scheduled time.

Figure 6. Remote Tasks window

Remote Tasks

All Tasks Server Power Options Server Administrator Deployment **Command Line**

Schedule State	Task Name	Task Label	Last Run	Created On	Updated On
<input checked="" type="checkbox"/>	Windows OMSA deploy	OpenManage Server Administrator Deployment for Windows.	2/21/2012 8:38:50 PM	2/21/2012 8:38:49 PM	2/21/2012 8:38
<input checked="" type="checkbox"/>	Sample - OMSA Upgrade Windows	OpenManage Server Administrator Deployment for Windows.		2/13/2012 11:19:56 AM	2/13/2012 11:1

Task Execution History:

Status	Task Name	Start Time	% Completed	Task State	Successful/Total Targets	End Time	Executed by User
	Windows OMSA deploy	2/21/2012 8:38:51 PM	0%	Running	0 / 1		PAVANAVM01\Administrator

Deploying OpenManage Server Administrator using OpenManage Essentials

10. To view the task execution details (for example: task progress and package information), right-click the task and select **Details** or double-click the task to open **Execution Details**.

Figure 7. Viewing remote task details

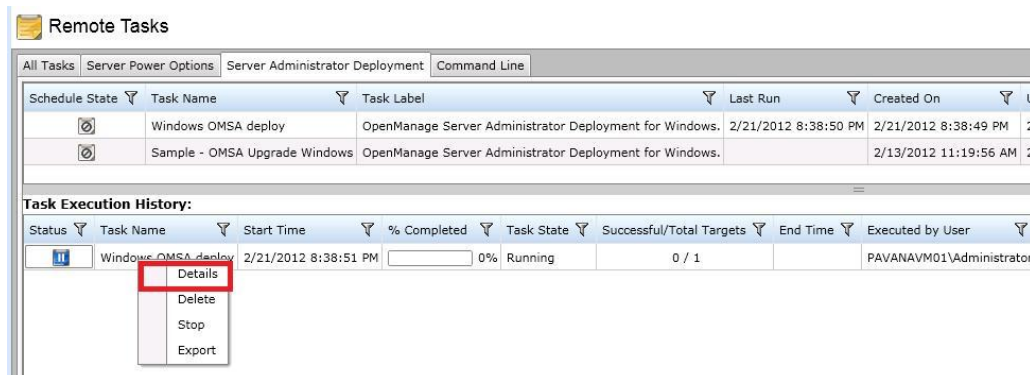
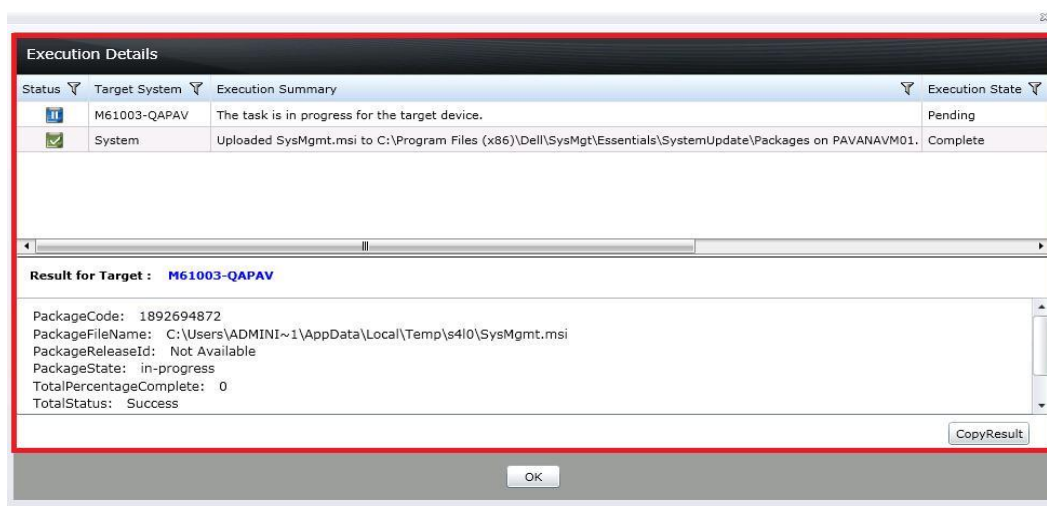
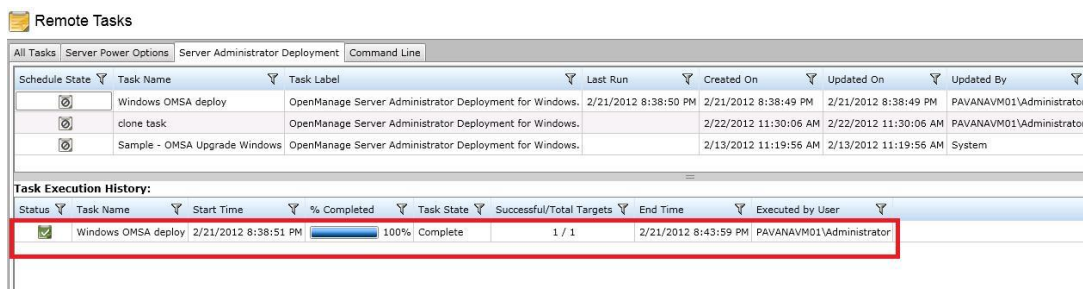


Figure 8. Viewing execution details



The task is marked completed once OMSA is deployed on the target.

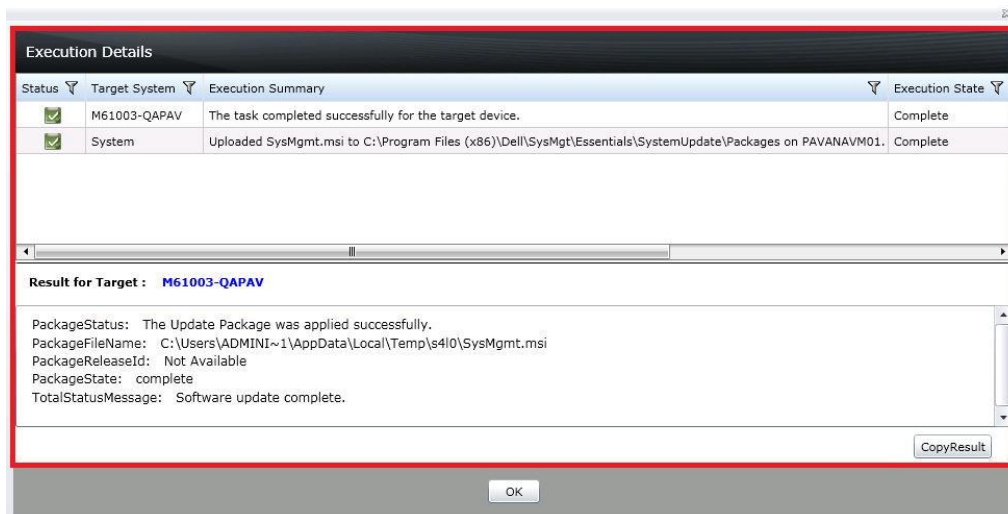
Figure 9. Viewing task execution history



The execution details window shows the status, summary, and state of the tasks (package download task and OMSA deploy task).

11. Copy the task results by using CopyResult button.

Figure 10. Using the CopyResult button



After OMSA is installed on the target, the target server gets classified under *Servers* in OpenManage Essentials device tree on rediscovery of the server.

Sample: Upgrade Windows task

Use the sample OMSA upgrade windows task for an OMSA minor version upgrade (for example, from OMSA 6.3 to OMSA 6.5). This task only supports the .msi package. The arguments mentioned in the sample task are required parameters for OMSA minor upgrade task.

OMSA upgrade parameters for a Windows system

The following is a required OMSA argument for minor version upgrades using the MSI packages:

REINSTALL=ALL REINSTALLMODE=VOMUS:

Note: For major upgrades (Example: 6.5 to 7.0), install arguments are not required.

For systems that have a version older than 4.3, you must upgrade to OMSA version 4.3, then to version 6.x, and then to 7.x

1. Right-click **Sample - OMSA upgrade Windows** task, and then click **Clone**.

Figure 11. Creating a new Cloned task



2. In the newly cloned task window, provide a task name and click **Ok**.

Figure 12. Naming the cloned task

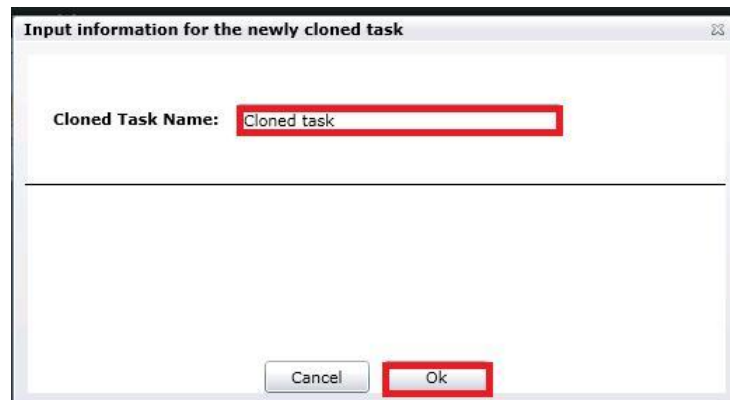
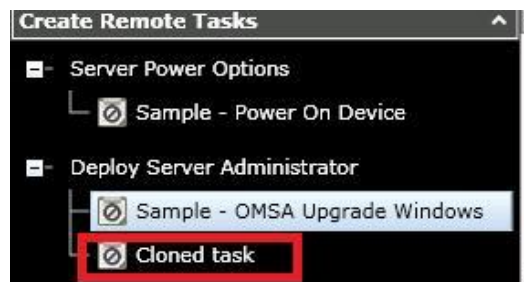
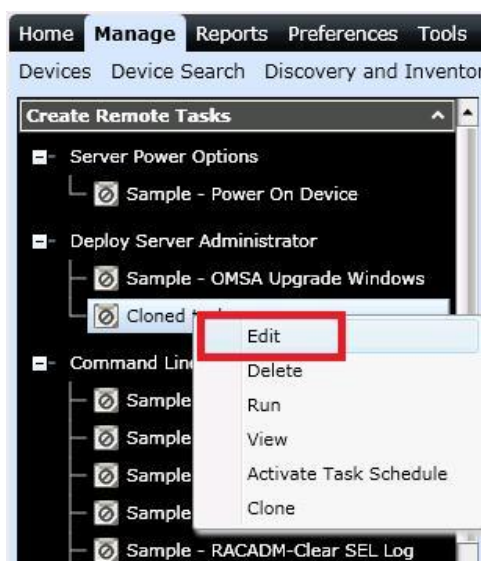


Figure 13. New Cloned Task



3. To edit the task and provide the OMSA package to be installed, right-click the cloned task and then click **Edit**.

Figure 14. Editing the cloned task



4. In the **Create a Deployment Task** window, browse to the location where the MSI package is located.
5. Click **Next**.

Figure 15. Deployment Wizard

The screenshot shows the 'Create a Deployment Task' wizard window with the 'Task Target' tab selected. The window has three tabs: 'General', 'Task Target', and 'Schedule and Credentials'. The 'Task Name' field contains 'Deploy Server Administrator Task - 7/29/2013 3:15:39 AM'. The 'Installer Path' field contains 'C:\Users\Administrator\Desktop\linux.tar.gz' and has a 'Browse' button next to it. The 'Install Arguments' field is empty. There are three checked checkboxes: 'Generate Trusted Key', '64-bit System', and 'Allow reboot (if required)'. At the top right, there are radio buttons for 'Windows' and 'Linux', with 'Linux' selected. At the bottom, there are buttons for 'Help', 'Cancel', 'Next', and 'Finish'.

6. Select **Target**.
7. Click **Next**.
8. Set the schedule (See [Creating an OMSA deployment task](#)).
9. Click **Finish**.

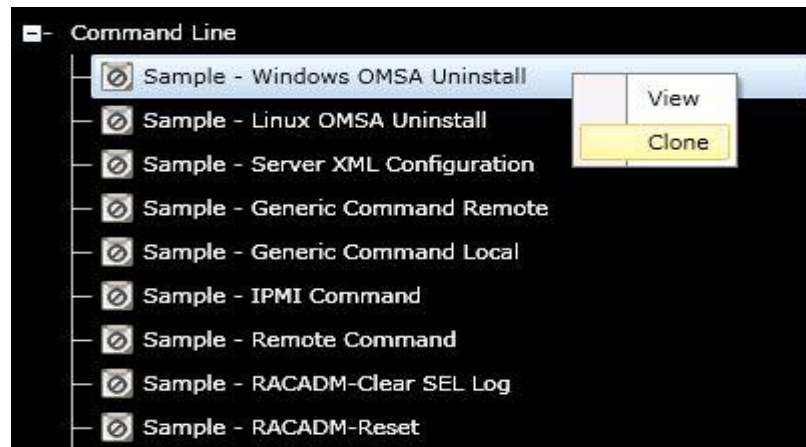
The task gets created and runs at the scheduled time. After the task is complete, OMSA will be upgraded at target server.

Sample: Windows OMSA Uninstall

Use the sample Windows OMSA uninstall task for uninstalling OMSA from a Windows target. The arguments mentioned in the sample task are required parameters for the OMSA uninstall task.

1. Right-click **Sample - Windows OMSA Uninstall** task, and then click **Clone**.

Figure 16. Creating a new cloned task



2. In the newly cloned task window, enter a task name and click **Ok**.

Figure 17. Naming the cloned task

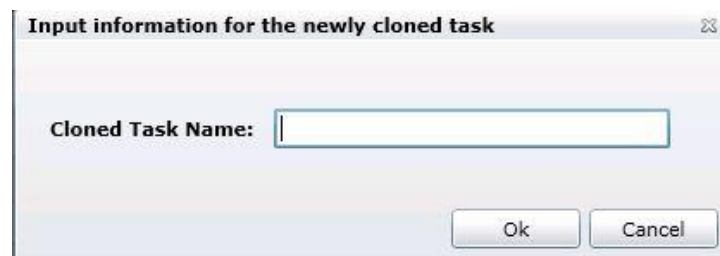
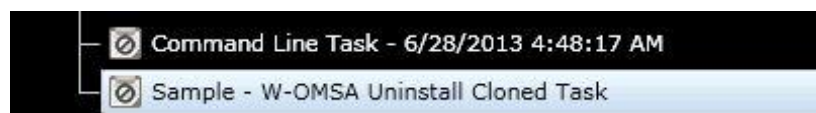
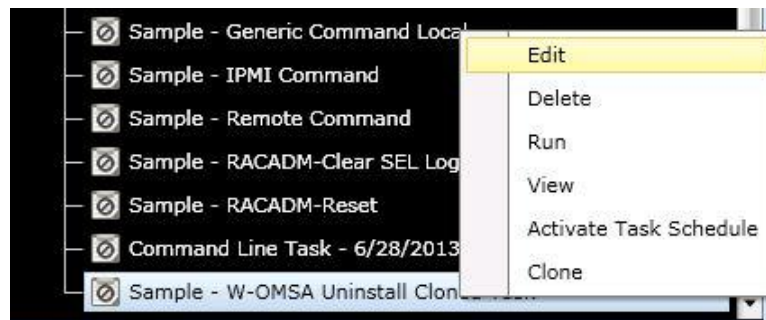


Figure 18. New Cloned task



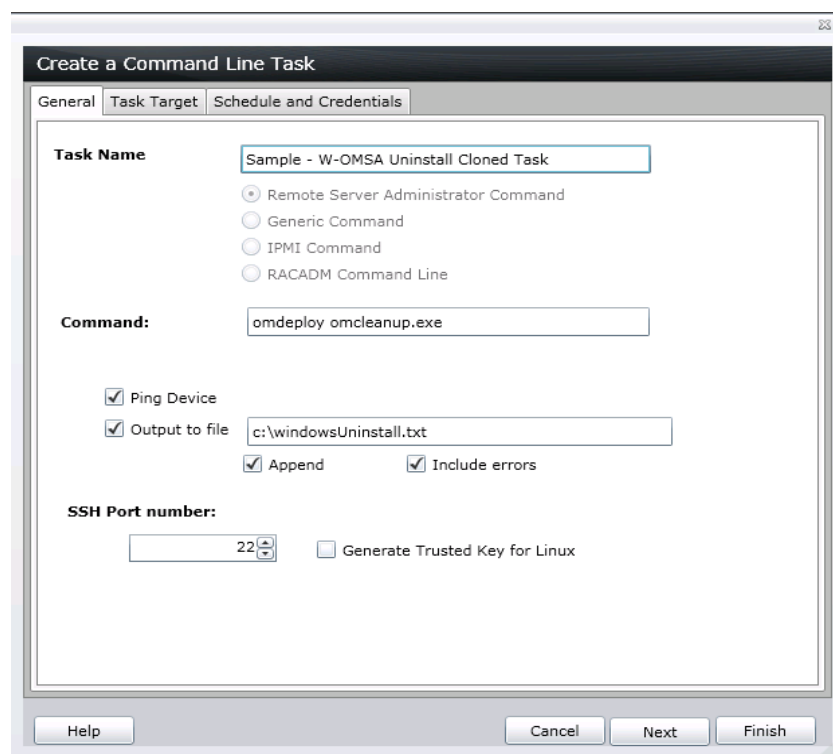
3. To edit the task to uninstall the OMSA package, right-click the cloned task and click **Edit**.

Figure 19. Editing the cloned task



4. In the **Create a Command Line Task** window, default command parameters will be defined to uninstall omsa.
5. Click **Next**.

Figure 20. Editing the cloned task



6. Select **Target**.
7. Click **Next**.
8. Set the schedule.
9. Click **Finish**.

The task gets created and runs at the scheduled time. After the task is complete, OMSA will be uninstalled from the target server.

Sample: Linux OMSA Uninstall

Use the sample Linux OMSA uninstall task for uninstalling OMSA from a Linux target. The arguments mentioned in the sample task are required parameters for the OMSA uninstall task.

1. Right-click **Sample - Linux OMSA Uninstall** task, and then click **Clone**.

Figure 21. Creating a new cloned task



2. In the newly cloned task window, provide a task name and click **Ok**.

Figure 22. Naming the cloned task

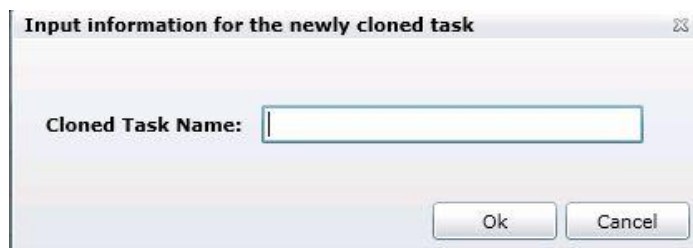
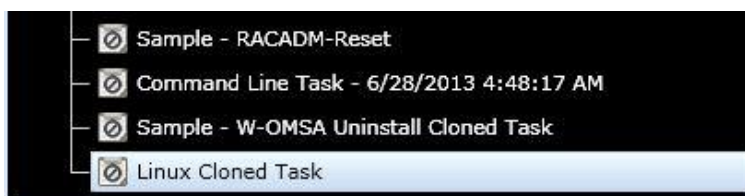
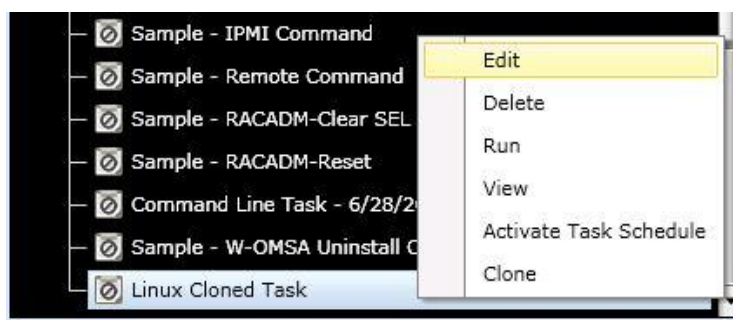


Figure 23. New cloned task



3. To edit the task to uninstall the OMSA package, right-click the cloned task and click **Edit**.

Figure 24. Editing the cloned task



4. In the **Create a Command Line Task** window, default command parameters will be defined to uninstall OMSA.
5. Click **Next**.

Figure 25. Deployment Wizard

The screenshot shows the 'Create a Command Line Task' wizard. The 'General' tab is selected. The 'Task Name' is 'Linux Cloned Task'. The 'Remote Server Administrator Command' radio button is selected. The command is 'bash /opt/dell/srvadmin/sbin/srvadmin-uninstall.sh'. The 'Ping Device', 'Output to file', 'Append', and 'Include errors' checkboxes are all checked. The 'Output to file' checkbox has a text field next to it containing 'c:\linuxUninstall.txt'. The 'SSH Port number' is set to 22. There is an unchecked checkbox for 'Generate Trusted Key for Linux'. At the bottom are 'Help', 'Cancel', 'Next', and 'Finish' buttons.

6. Select **Target**.
7. Click **Next**.
8. Set the schedule.
9. Click **Finish**.

The task gets created and runs at the scheduled time. After the task is complete, OMSA will be uninstalled from the target server.

Deploying OMSA as Sudo User

OpenManage Essentials version 1.2 or later enables support for deploying OMSA as a sudo user. To deploy OMSA as sudo user, the following are required on the selected targets:

- Windows Management Instrumentation service must be running.
- The default Temp folder (C:\Users\<username>\AppData\Local\Temp) and (/tmp) must be available and should have sufficient space. You must also ensure that the default temp folder should not be deleted or moved.

Note: Before you deploy OpenManage Server Administrator using sudo, create a new user account, edit the sudoers file using the visudo command, and add the following:

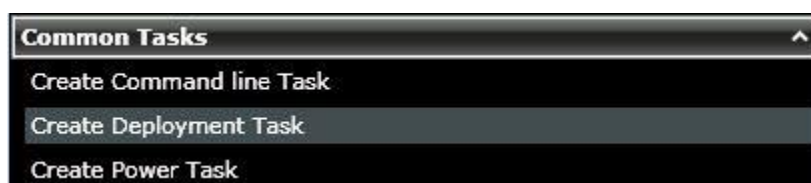
- **For target systems running 32-bit operating systems:** Cmnd_Alias OMEUPDATE = /bin/tar, /opt/dell/srvadmin/bin/omexec,/tmp/LinuxPreInstallPackage/runbada,/tmp/LinuxPreInstallPackage/omexec <sudo_username> ALL=OMEUPDATE, NOPASSWD:OMEUPDATE.-
- **For target systems running 64-bit operating systems:** Cmnd_Alias OMEUPDATE = /bin/tar, /opt/dell/srvadmin/bin/omexec,/tmp/LinuxPreInstallPackage64/runbada,/tmp/LinuxPreInstallPackage64/omexec <sudo_username> ALL=OMEUPDATE, NOPASSWD:OMEUPDATE.

You can create tasks to deploy OpenManage Server Administrator on servers installed with Linux operating systems. You can also plan a date and time to schedule the OpenManage Server Administrator deploy task as a sudo user:

To create an OpenManage Server Administrator deployment task for sudo user:

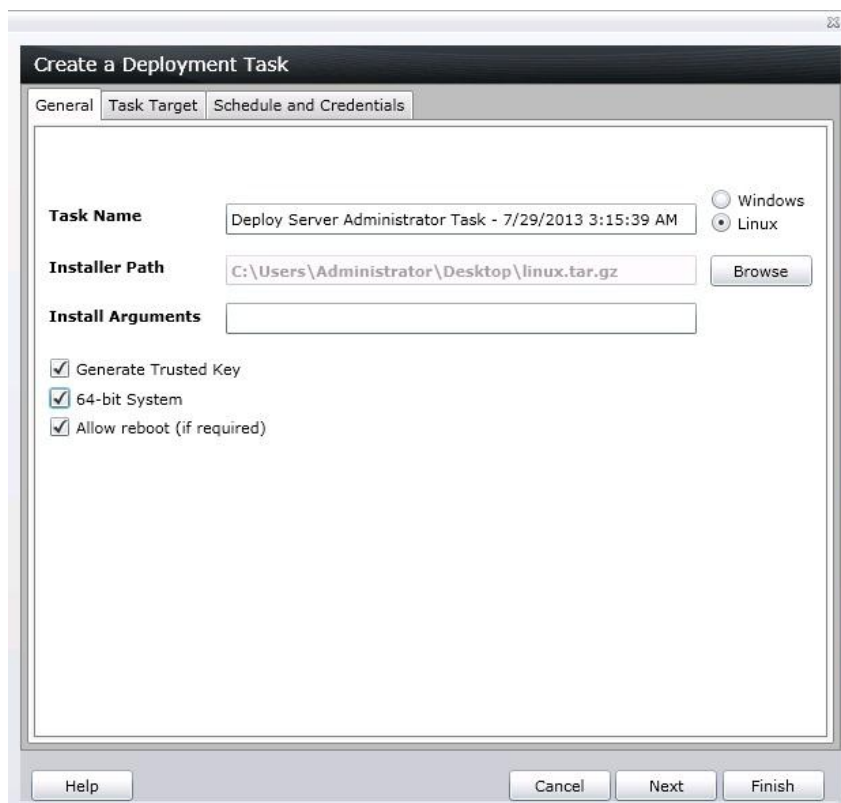
1. Click Manage → Remote Tasks → Common Tasks → Create Deployment Task.

Figure 26. Create Deployment Task



2. After providing a task name, select Linux and provide the installer path. If the target is installed with 64-bit Linux operating system, select “64-bit System” as shown in Figure 27.

Figure 27. Deployment Wizard



3. On **Task Target**, do one of the following:-
 - a. Select a query from the drop-down list or create a new query by clicking the New button.
 - b. Select the Linux servers on which you want to run the task and click Next.
4. On **Schedule and Credentials**, select either “**Set schedule**” or “**Run now**”, and provide the sudo user credentials as shown in Figure 28.
5. Select “**Enable Sudo**” and click “**Finish**”.

Figure 28. Schedule and Credentials

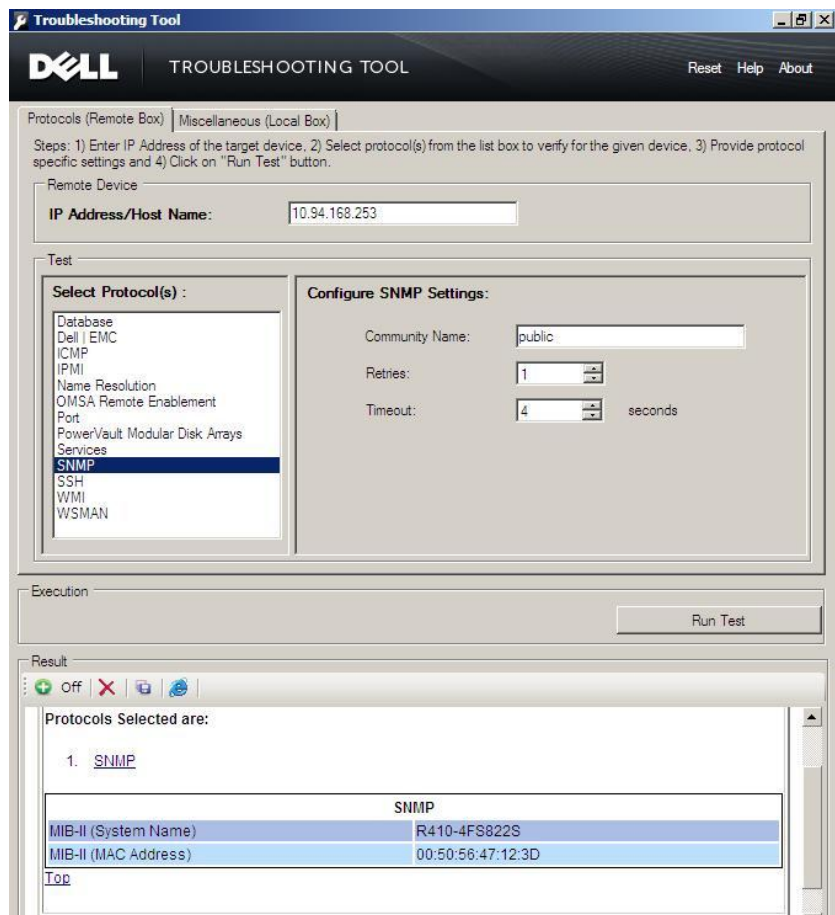
The screenshot shows a window titled "Create a Deployment Task" with three tabs: "General", "Task Target", and "Schedule and Credentials". The "Schedule and Credentials" tab is active. It contains two main sections. The first section, "Set schedule:", has a checkbox "Activate Schedule" which is checked. Below it are two radio buttons: "Run now" and "Set schedule". The "Set schedule" radio button is selected. To the right of the "Set schedule" radio button is a text box containing "7/29/2013 3:25 AM" and a calendar icon, followed by "(UTC-08:00)". The second section, "Enter credentials of the remote target(s)", has a placeholder text "<domain>\<user name> or localhost\<user name>". Below this are two text boxes: "User Name:" containing "testing" and "Password:" containing "*****". Below the password box is a checkbox "Enable Sudo" which is checked, and an "SSH Port:" label next to a text box containing "22". At the bottom of the window are four buttons: "Help", "Cancel", "Back", and "Finish".

Troubleshooting Tool

Use the Troubleshooting Tool that is installed with OpenManage Essentials for specific protocol testing. The Troubleshooting Tool can be launched using the desktop icon.

A server without OMSA shows no information about the server administrator when an SNMP test is run using the Troubleshooting Tool.

Figure 29. Running the Troubleshooting Tool



When the SNMP test is run on the server with OMSA, it displays the server administrator information.

Figure 30. Server administrator information



Troubleshooting

Login failure

You may have entered incorrect credentials (for the managed system). Make sure the user has permission to install OMSA on the managed system.

Unable to deploy OMSA

Make sure that the package used is applicable to the system where OMSA has to be installed.

Make sure that the .msp and .exe files are not used for fresh OMSA installation on a Windows target. For a Linux target, if an operating system specific package is used, make sure that the correct package is chosen.

OMSA task is running for long period of time

Make sure that the correct arguments are passed during installation.

Use arguments only if selective components must be installed or for the OMSA upgrade. If the install used the wrong arguments, then the OMSA Deploy task never completes.

Right-click the task, and stop the task. Log in to the managed node, open task manager and end the following processes (if they are still running):

- omexec.exe
- msixec.exe
- RunBada.exe

Recreate the OMSA deployment task with the package applicable to the managed system and correct install arguments in OpenManage Essentials (Install arguments are optional).

OMSA is installed successfully, but the version is not updated in the OpenManage Essentials console

- To get the updated/installed version of OMSA, perform inventory on the target server in OpenManage Essentials.
- Typically the OMSA installation/upgrade does not require reboot. If the updated version is not reflected, restart SNMP services and OMSA services.

Frequently Asked Questions

1. Where are OMSA packages downloaded in OpenManage Essentials?

The OMSA package is downloaded at:

C:\Program Files (x86)\Dell\SysMgt\Essentials\SystemUpdate\Packages

2. Where are OMSA packages downloaded on the managed system?

The OMSA packages are downloaded at the following locations:

Windows: C:\Users\<USER>\AppData\Local\Temp\<random folder name>

Linux: /tmp/BadaXXXX

3. Where are logs generated on the managed system?

Windows: C:\WINDOWS\Temp -

Linux: /tmp/BadaXXXX

4. How do I configure firewall settings?

If Firewall is enabled, you must configure it on both the OpenManage Essentials management station as well as the managed node.

- On the OpenManage Essentials station:
 - i. Open TCP port 135.
 - ii. Add the application "omremote.exe" (located in Essentials\bin) to the Firewall exception list.
- On the managed system that is to be updated:

Windows:

Run the following command using the command prompt on a Windows managed system:

"netsh firewall set service RemoteAdmin"

Linux:

Refer to your specific Linux distribution for configuring firewall settings. Configure the IPTABLES to allow access to UDP Port 161 and 162 for SNMP communication and TCP Port 1311 for OMSA.

5. What is the maximum recommended number of targets for an OMSA Deploy tasks?

The maximum recommended targets for an OMSA deploy task is 20.

Summary

This white paper describes how to create an OMSA deployment task using OME, location to download OMSA packages, arguments used during installation and advantages of installing OMSA on the managed node. Installing OMSA on the managed system helps system administrators manage systems better using OpenManage Essentials.

Limitation: You can use OpenManage Essentials to deploy OMSA only on Windows, ESX, Red Hat, SUSE Linux systems and not on ESXi and XEN servers.

- OMSA deployment on Citrix XenServer:

Install OMSA manually on the managed node. Dell OpenManage is available for XenServer as a Supplemental Pack. Download and install the supplemental pack from support.dell.com.

- OMSA deployment on ESXi server:

For more information, see *How to setup and configure ESXi 5 for use in OpenManage Essentials* white paper and the *Installing OpenManage Server Administrator on ESXi4 with OpenManage Essentials* video at DellTechcenter.com.

Learn more

For more information on Dell OpenManage Essentials, visit DellTechcenter.com/OME.